

# Notice of Allowability

Application No.

10/021,751

Examiner

Frank M. Lawrence

Applicant(s)

BABICKI ET AL.

Art Unit

1724

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment after final filed March 15, 2004.
2. ☒ The allowed claim(s) is/are 73, 74, 76, 79, 82-89, 91, 98, 100-110, 122-127, 159-166, 172-174, 178, 184, 188 and 190-257 (renumbered as 1-113).
3. ☒ The drawings filed on 29 March 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Frank M. Lawrence  
Primary Examiner  
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## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 73, 74, 76, 79, 82-89, 91, 98, 100-110, 122-127, 159-166, 172-174, 178, 184, 188 and 190-257 are allowed.
2. The following is an examiner's statement of reasons for allowance: Claim 73 recites that the guard layer zone is isolated on shutdown from the adsorbent zone by an isolation valve in a fluid path between the guard layer zone and the adsorbent zone, which is not taught or suggested in the prior art in combination with the recited method. The prior art also fails to disclose or suggest a method for reducing adsorbent degradation while producing a product gas in a PSA process comprising providing the PSA apparatus arrangement as recited in claim 82, a method for increasing operation time before shutdown of a rotary fast cycle PSA apparatus comprising providing the arrangement of claim 98, or for shutting down a PSA apparatus comprising operating a rotary PSA apparatus and introducing a blanket gas in a feed end of the apparatus followed by purging with a purge fluid as recited in claim 83, or operating a PSA apparatus having the arrangement of claim 122 and purging adsorbers with product flow and heating the guard layer. The prior art additionally fails to suggest a method for producing a positive pressure park mode in a fast cycle rotary PSA apparatus comprising the step of engaging a parking seal in combination with the recited method in claim 110, or a method for reducing degradation of a contaminant sensitive adsorbent material including providing the arrangement recited in claim 159 and reducing diffusion of the at least one contaminant from the guard material to the at least one contaminant-sensitive adsorbent material.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence  
Primary Examiner  
Art Unit 1724

*Frank Lawrence*  
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